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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,729	01/17/2001	John David Bacchiaz	9300-1	6624

7590 06/16/2006  
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EXAMINER

DANG, HUNG Q

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

11

<b>Office Action Summary</b>	Application No. 09/764,729	Applicant(s) BACCHIAZ ET AL.	
	Examiner Hung Q. Dang	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 41-65,69-73,75-77 and 79-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 41-62,64,65,69-73,75-77 and 79-88 is/are rejected.
- 7) ☒ Claim(s) 63 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This communication is in response to application's RCE dated 3/2/2006. The petition dated 3/10/2006 has been entered.

### **Objection**

2. Claim 88 is objected under 37 CFR 1.75 as being a substantial duplicate of claim 80. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP 706.03(k).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 54, 55, 58-62, 65, 69-73 and 75-76 rejected under 35 U.S.C. 102(e) as being anticipated by Bonder et al. U.S. Patent 6,078,265.

**Regarding claims 54, 69-73, 75 and 76**, Bonder et al. teaches a mechanical lock body (Figure 5, unit 12) engageable with a biometric key (Figure 5, unit 11) which incorporates a biometric sensor (Figure 3, unit 37) for transmission of a signal

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representing a biocode of data generated by the biometric sensor, said mechanical lock body having a moveable component (Figure 5, unit 52; and paragraph bridging columns 6-7) having one or more contact portals (Figure 5, unit 18) for engagement with corresponding contact(s) of the biometric key (Figure 3, unit 17) when said key is engaged with the movable component (paragraph bridging columns 6-7); and a barrel for retention (Figure 5, unit 51) of said movable component having contact(s) (Figure 5, unit 57) for engagement with the contact portal(s) of the movable component or cylinder whereby in use the signal is forwarded to processing means interfaced or electrically connected with the barrel upon engagement of the biometric key with said movable component for automatic generation of the signal for granting access to an authorized user of a facility (column 3, lines 11-13) accessible by the biometric key (columns 4-6).

**Regarding claim 55**, the barrel of the lock body disclosed by Bonder et al. also has a plurality of tumblers (Figure 5, units 53; and paragraph bridging columns 6-7) for engagement with a plurality of wards of said biometric key.

**Regarding claims 58 and 59**, Bonder et al. also teaches a mechanical lock body as claimed in claim 54, wherein after analysis of the signal by the processing means, access to the facility is provided by activation of a linear motor or solenoid located within the lock body, which is in electrical connection with the processing means, wherein said linear motor or solenoid is actuated to facilitate rotation of the movable component or cylinder relative to the barrel to cause unlocking of the lock body (line 59 of column 6 to line 10 of column 7).

**Regarding claim 60**, each of the contacts contained in the movable component disclosed by Bonder et al. are also spring biased to a position in abutment with a corresponding contacts of the biometric key (Figure 5, contacts 53 are spring biased; paragraph bridging columns 6-7)

**Regarding claim 61**, each of the contacts in the key body disclosed by Bonder et al. is also normal to a longitudinal axis of the biometric key in use.

**Regarding claim 62**, each of the contacts disclosed by Bonder et al. are also accommodated within an insulator (the lock mechanism 12 is an insulator).

**Regarding claims 64 and 65**, Bonder et al. also teaches an indicator means indicating validation of biometric data generated by the sensor (column 7, lines 11-27; the indicator means in this case is the transmitter for transmitting the proper control signal to the vehicle ignition; also column 4 lines 23-26 suggests using LED as an indicator means).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 41-50, 52, 53, 80 and 81-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonder et al. U.S. Patent 6,078,265 in view of Spain U.S. Patent 5,311,757.

**Regarding claims 41-44, 46-48 and 81-84**, Bonder teaches a biometric key (Figure 1, unit 11) in the form of a mechanical key (unit 11) having a key body incorporating a biometric sensor (Figure 3, unit 37) for transmission of a signal represented by a biocode of data generated by the biometric sensor, said key body engageable with a mechanical lock body (Figure 1, unit 18) and having one or more electrical contacts (Figure, units 17; and column 6, lines 4-18) for engaging mating electrical contact(s) (Figure 1, units 18; and column 4, lines 27-40) of the mechanical lock body whereby in use said signal is forwarded to processing means interfaced with or electrically connected to the mechanical lock body for granting access to an authorized user to a facility (column 3, lines 11-13) accessible by the biometric key upon engagement of the key body with the mechanical lock body (column 4, lines 27-40), **except** characterized in that the sensor is surrounded by an insulator in the key body and the sensor is electrically connected to a circuit board associated with the insulator which circuit board is electrically connected to said one or more contacts, wherein the insulator is insertable into a slot of the key body and attached thereto.

Spahn teaches a key having an electronic circuit housed in a recess of the key body, wherein the recess is filled (inserted) with an insulating casting compound to protect the circuit from dirt and moisture (paragraph bridging columns 3-4).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide surrounding the sensor circuit, disclosed by Bonder et al., with an insulator in the key body and the sensor is electrically connected to a circuit board associated with the insulator which circuit board is electrically connected to said

one or more contacts, wherein the insulator is insertable into a slot of the key body and attached thereto, as evidenced by Spahn, in order to protect the circuit from dirt and moisture.

**Regarding claim 45**, the circuit board taught by Bonder et al., at one end, does have contact traces or wire leads which engage with corresponding contacts traces of an adjacent end of the biometric sensor (figure 4 shows that the scanner 37 does have wire leads which engage with the contact traces of the circuit board 42).

**Regarding claims 49 and 85**, the key body of the biometric key disclosed by Bonder et al. does have a handle (Figure 3, unit 31) incorporating the biometric sensor and a blade portion (Figure 3, unit 33).

**Regarding claim 50**, the blade portion disclosed by Bonder et al. does have a plurality of wards (Figure 3, units 19).

**Regarding claims 52 and 86**, Bonder et al. also teaches a pair of contact pins (figure 3, contact pins 17) located in accommodating insulator sleeves (key body 31 is an insulator).

**Regarding claims 53 and 87**, the key body of the biometric key disclosed by Bonder et al. also incorporates a smart chip (Figure 4, unit 37).

**Regarding claims 80 and 88**, the key body disclosed by Bonder et al. also has an inbuilt processor chip (Figure 4, unit 42).

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7. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonder et al. U.S. Patent 6,078,265 in view of Spaln U.S. Patent 5,311,757 and in further view of Imedio U.S. Patent 4,947,662.

**Regarding claim 51**, Bonder et al. in view of Spaln teaches a biometric key as claimed in claim 51, except wherein the blade portion does not incorporate wards.

One skilled in the art would recognize that the conventional key blades have been designed to incorporate wards and also not including wards depending on the design of the key blade and the lock in order to rotate the tumbler mechanism of the lock, as evidenced by Imedio.

Imedio teaches an electronic locking device, wherein the key blade does not incorporate wards (Figure 5, blade 2 does not incorporate wards; last paragraph of column 4).

Therefore, by conventionality, it would have been obvious to one skilled in the art at the time the invention was made not to provide wards to the key blade of the key disclosed by Bonder et al. in view of Spaln, as evidenced by Imedio.

8. Claims 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonder et al. U.S. Patent 6,078,265 in view of Cockburn U.S. Patent 5,055,658.

**Regarding claim 56**, Bonder et al. teaches a mechanical lock body as claimed in claim 56, except incorporating an internal processing unit in said barrel. The processing unit taught by Bonder et al. is located outside the barrel (Figure 1, unit 13).



Cockburn, in the same field of endeavor, teaches a mechanical lock body, which includes an internal processing unit (Figure 1, unit 2) in the retention barrel in order to enable said lock to carry out a programming operation (paragraph bridging columns 1-2).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to equip an internal processing unit in the retention barrel of the lock body disclosed by Bonder et al., as evidenced by Cockburn, in order to carry out certain programming operation.

**Regarding claim 57**, Bonder et al. also teaches an external processor or computer for enrolment of biometric data (column 5, lines 50-62).

9. Claims 77 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonder et al. U.S. Patent 6,078,265 in view of Hyatt, Jr. et al. U.S. Patent 5,140,317.

**Regarding claims 77 and 79**, Bonder et al. teaches a process for providing access to a facility, which incorporates a movable part which includes the steps of:

- engaging a biometric key having a biometric sensor (figure 3, unit 37) for transmission of a signal represented by a biocode of data generated by the biometric sensor, said key having one or more contacts (figure 3, units 17) with a receptor body operatively associated with or attached to said movable part whereby said contact(s) of the biometric key engage corresponding contacts of the receptor body (figure 5, unit 12) whereby

electrical power is provided to processing means interfaced with or electrically connected to the receptor body whereby the signal is generated by engagement of the biometric key with the receptor body and forwarded to the processing means which includes a processing unit (Figure 6, unit 42) having a database (column 7, lines 19-27);

- matching the biocode with the database of the processing unit to permit validation of the biocode (column 7, lines 7-10); and
- providing access to the facility of an authorized user by causing movement of said movable part to an unlocked position (column 7, lines 7-10); and
- wherein enrolment of an authorized biometric signature takes place by initial engagement of said biometric key with said receptor body and actuation of the biometric sensor for automatic generation of a signal representing said biocode of data which represents said authorized biometric signature which is then captured into said database of the processing unit (implied by column 4 lines 5-10); and
- **except** wherein said processing unit is interfaced with a host computer having a database; and wherein the host computer requests personal and/or demographic information relative to the authorized biometric signature before said capture of the authorized biometric signature. (Bonder et al. already implicitly suggests the requesting of personal and/or demographic information relative to the authorized biometric

signature before the capture of the authorized biometric signature,  
except explicitly from a host computer (column 4 lines 5-10)).

Hyatt Jr. et al. also teaches an electronic lock security system, which includes a host computer for updating the coded data stored in a key (column 3, lines 25-40). One skilled in the art would recognize that using a host computer in electronic security system for updating and storing data have been commonly known. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to further provide a host computer to the biometric security system disclosed by Bonder et al., as evidenced by Hyatt Jr. et al., so that the enrolment of new keys can be updated and coded data can be stored in a host computer.

***Allowable Subject Matter***

10. Claim 63 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Regarding claim 63,** the prior arts of record fail to teach or disclose a mechanical lock body as claimed in claim 60, wherein within each insulator where are provided an inner contact for touching corresponding contacts of biometric key in use and an outer contacts separated from an adjacent inner contact by a spring.

### Conclusion


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571) 272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Q. Dang  
6/5/2006

HD

  
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